

lues when there are meningitic symptoms as shown by cell increase, increase in total proteins, globulin fraction, complement content, and coagulability. As in acute meningitis the amboceptor goes away as the inflammatory process subsides. There exists no marked parallelism between protein and hemolysin reactions. Kafka and Rautenberg represent these by a numeral in which the numerator indicates the antibody value, the denominator the strength of Phase I or the total proteids. In general paresis the number is greater than 1. In fluids from cases of general paresis a clouding occurs even at 30 per cent. saturation with ammonium sulphate, and in cases of acute meningitis a similar result occurs with 28 per cent. This protein fraction bears some relation to the amboceptor content. Quantitative proteins were determined with Nissl's method. Kafka and Rautenberg consider that Phase I offers the best guide to the influence of treatment.

The Action of Various Lipoids Isolated from the Endocrine Glands.

—ISCOVESCO (*Comp. rend. de l. Soc. d. Biol.*, 1913-14, lxxv and lxxvi).

Ovaries: The lipid found in ovarian tissue is the same in all animals and possesses the property of stimulating the ovaries and especially the uterus, and calling forth their hypertrophy. This lipid, moreover, stimulates the thyroid, and has some regulating influence and hastening actions upon the growth of young individuals. *Testes:* Dogs were injected every other day in the cervical region with a lipid made from testes. Such injections excite the testes very markedly, probably through centres in the spinal cord; the thyroid and kidneys are weakly stimulated. It stimulates growth in young animals while grown ones increase considerably in weight. Similar results are seen in man when given 2 c.c. of the lipid subcutaneously every day. *Adrenal Cortex:* Lipoids from the cortex stimulate the medulla of the gland markedly, the liver and kidneys very little. It has a strong irritating action upon the skin; in man it causes tachycardia and hyperhidrosis; daily injections of small amounts increase the general condition. *Adrenal Medulla:* This lipid shows properties very different from those of the cortex. It is a mild stimulant to the adrenal and heart. Daily injections in man cause bradycardia and increased blood pressure. It makes the individual feel remarkably well and ready for work. From these observations Iscovesco thinks that in Addison's disease the asthenia, cardiac and vascular symptoms are due to medullary changes and the pigmentation results from primary or secondary changes in the cortex.

Biological Studies on Eosinophilia.—This report of WEINBERG and SÉGUIN (*Ann. de l'Inst. Pasteur*, 1914, xxiii, 470) deals with the production of local eosinophilia by means of eosinophilotactic substances, given to untreated and immunized animals, as well as the relationship between local and blood eosinophilia and anaphylaxis. "Local eosinophilia" was studied in the lids of horses after a few drops of the body fluid of *Ascaris megalocephala* had been instilled into the eye. Following this, resection of the lids occurred at intervals of from a quarter of an hour to ninety-six hours, and this material was studied histologically. Eosinophiles are found out in the connective tissues of the conjunctivæ as soon as a half an hour after the instillation and at this

time the capillaries are filled with polynuclear cells of all kinds. The chemotaxis for the eosinophiles disappears rapidly. The degree of the local eosinophilia is due not merely to the reagent employed, but depends as well upon the eosinophilic content of the animals' blood. Thus, if the latter is low, the local reaction consists solely of an outpouring of neutrophilic leukocytes. There are no substances as yet known which are purely chemotatic for eosinophiles. Similar changes were observed in guinea-pigs injected subcutaneously or intraperitoneally with the fluid from hydatid cysts, or the watery extract of sclerostoma. Of 150 pigs only 7 failed to show eosinophilia following intraperitoneal injection. Guinea-pigs given two or more injections show an increased chemotaxis as a result of this immunization, and numerous eosinophiles can be found in the peritoneal exudate of such animals, tending to show that there is developed a genuine specific reaction to the substance injected, since these animals react, as do normal ones, to the injection of chemotatic substances other than those used for immunization. It can be shown clearly that local eosinophilia occurs at the expense of the eosinophilic content of the circulating blood; the decrease in the blood is most pronounced in immune animals. Pulmonary eosinophilia, which is regarded by some as a characteristic injury in anaphylaxis, occurs normally in most guinea-pigs with well developed blood eosinophilia. The rise that occurs in sensitized animals is not the result of anaphylaxis, but is due to the direct action of the antigen upon the blood-forming centres, which have been sensitized by the primary injection.

Paroxysmal Tachycardia.—DUHOT and BOEZ (*Province méd.*, 1914, xxvii, 260) deal with the history, illness, and autopsy findings in two cases of paroxysmal tachycardia. One came under treatment by reason of numerous short attacks, the other by reason of anginal seizures. A full discussion of the condition is given as well as the theories of its causation. The original view that it is a purely nervous phenomenon is now replaced by the conception of the disease as being a purely cardiac one. The patients characteristically complain of something being out of order in the breast, and this occurs in association with a pulse rate of about 200, an embryonic rhythm, and a fall in blood-pressure. During the seizures one may observe oliguria, albuminuria, and even glycosuria. There are usually present pallor, hyperhidrosis, vomiting, and anisocoria. Very often marked dilatation of the heart occurs during the attack, which may last a few minutes or persist over a week. Suddenly the heart returns to its normal rate, though frequently there are extrasystoles for a while. Once in a while the attack may set in and end in a slow manner. The frequency of the attacks is extremely variable. Duhot and Boez describe three forms: (1) the abortive; (2) a type characterized by long periods of remission; and (3) a progressive type. They consider the prognosis bad in the last two forms. Of etiological moment are diseases of the heart, heredity and a neuropathic constitution, while the exciting factors of the attacks are many, such as psychic traumata, dreams, overexertion, digestive upsets, the onset of puberty, menopause, etc. Infections play a role, and especially rheumatic fever. The nervous system has been held accountable, first by a paralysis of the vagus, then by some process involving the